COMPUTER TOOLS
for Planning, Conservation & Environmental Protection

In an effort to increase awareness of Internet resources available to local governments and citizen planners the Wisconsin Department of Natural Resources (DNR) has initiated a technical assistance program focused on computer tools for planning, conservation, and environmental protection. This program has been made possible by a water quality management grant awarded to the DNR by the U.S. Environmental Protection Agency (EPA).

As part of our technical assistance program we have developed this series of articles. Each article will highlight a different tool, discuss its possible uses, and offer step-by-step tutorials. It is our hope that the information provided here will insure that all involved in local planning processes have equal access to valuable information and analysis tools. Gaining access to these free web-based planning tools will assist communities with preliminary selection of alternative approaches to watershed and community planning. When community planners, developers, and citizens have access to similar information they are more readily able to interact and jointly discover possible solutions to land use issues.

Definition of a Tool – Interactive Mapping

To help evaluate the available tools, we have sorted them into three categories – interactive mapping, data access, and predictive modeling. This article focuses on interactive mapping tools.

The development and availability of web-mapping software in the late 1990s spawned a proliferation of Internet sites that enable citizens to access government-maintained data and information useful in local environmental protection and planning. The resulting interactive data mapping tools allow people to access downloadable data, integrate that data spatially, zoom-in on areas of interest, query the associated databases, search for selected data, and produce customizable maps. Since the mapping tools are data driven, they access "real time" data and ensure the most current information is used (i.e. as the data and databases used to create the maps are updated and change, so do the maps).

Maps add a visual element to the planning process and can be an effective way to communicate consequences of land use decisions. Such tools enhance community participation when people can see potential changes in relation to where they live.

Wisconsin DNR Registry of Closed Remediation Sites

DNR's Remediation and Redevelopment (RR) Program oversees the investigation and cleanup of environmental contamination and the redevelopment of contaminated properties. RR provides a comprehensive, streamlined program that consolidates state and federal cleanups into one program (e.g., hazardous waste cleanup, underground storage tank investigation & cleanup, spill response, state-funded clean-ups, and brownfields).
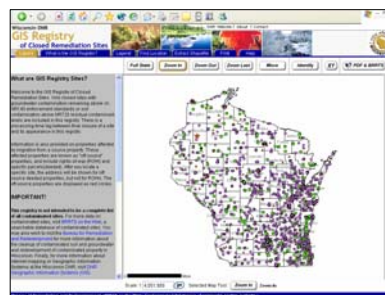
The objective of this computer tool is to make information on closed remediation sites available to the public and DNR staff quickly and easily since new well construction near sites listed on the Registry may require special construction techniques. Closed remediation sites included properties where groundwater or soil has been contaminated, steps have been taken to stabilize or remediate the contamination, and the state is satisfied that no further cleanup efforts are necessary. In some cases, the owner has agreed to a restriction on the legal uses of the property in exchange for not having to take further action.

The Registry of Closed Remediation Sites records these sites in a computerized registry available over the Internet. With an interactive map, users can search by county or city, township, or village. The Registry allows users to view, print, and download digital versions of documents relevant to each site.

Notes From The Developer

Jane Lemcke, Wisconsin DNR Hydrogeologist Program Coordinator, states that the primary reason behind the development of this tool was, "to replace most deed restrictions relating to contamination, which were cumbersome and unpopular, with an online resource." Jane says the data available through the registry is valuable for, "info for general development planning, smart growth, property acquisitions, and planning infrastructure maintenance and development (location of contaminated sites).

How to Access the Registry

Using your Internet browser, go to **http://maps.dnr.state.wi.us/brrts**.

When you open the GIS Registry of Closed Remediation Sites, you will see a map frame on the right, a number of blue tabs across the top and white buttons for navigational/informational purposes. These controls allow you to navigate in the map and select particular sites.

Here are some basic hints to help you get started:
- Use <Zoom In>, <Zoom Out>, and <Move> to view more (or less) detail.
- Use the "Find Location" tool to locate an area of interest quickly.
- Click on the "Layers" tab to select different map layers to view.

How to Find Site Specific Information

The Identify tool displays information about each visible layer at the map location clicked. To use, click the <Identify> tool then the location on the map. The left window displays the results.

This tool displays links to a PDF and the BRRTS database. To use, click <PDF & BRRTS> then on the desired map location. The left window displays the links.

Important Tabs

This tab will allow you to turn on/off layers. To use, check the box to turn layers on and uncheck to turn layers off. By default many of the layers will turn on and off automatically.

This tab will allow you to see the legend for each layer that appears in the map frame.

This tab will allow you to find features based on different options. Use this tool to select a specific GIS Registry site and zoom to it. You can also zoom to a specific city, village or county.

If you choose "BRRTS Activity", select one of the three search methods, then enter the number or name of the site you are looking for in the text box. Select a county if you want all sites in a specific county. Then, click "Find Activity". Choose the appropriate site from the drop down box, then click "Zoom to Activity".

This tab allows the user to download a GIS shapefile containing the GIS Registry of Closed Remediation Sites for the area displayed.

Click "Print" to create a printable version of your map. Enter map title. Select page size. Choose scale. Click "OK".

Click this tab for descriptions of how the white buttons work.

This tab will return you to the introductory page containing instructions and frequently asked questions.

Please note the registry does not list all Closed Remediation Sites. Residual soil contamination is listed only for sites where closure was approved after August 1, 2002.

For more information on the registry please email Jane Lemcke at Jane.Lemcke@dnr.state.wi.us

For More Information:
www.dnr.state.wi.us/org/es/science/landuse
WDNR's land use website

Midwest Spatial Decision
Support System Partnership
www.epa.gov/waterspace

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